Attorney's Docket No. 00786-637US1

Applicant: Jennifer K. White

Serial No.: 10/512,005 Filed: October 18, 2004

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

- 1. (Original) A method of forming a prosthetic valve, comprising:
 - a. providing a tube of material having an inner wall, an outer wall, a diameter"d", a height "h" and a wall thickness "t";
 - cutting three longitudinal incisions from one end in said material about
 120 degrees apart to form three flaps, each said flap having a first edge, a
 second edge generally parallel to said first edge, and a bottom edge;
 - c. involuting each said flap within said tube; and,
 - d. attaching each said first edge and second edge of each involuted flap to said inner wall of said tube.
- 2. (Currently amended) The method of Claim 1, wherein said three longitudinal incisions have a length "L", such that L = 1/2h-2t, where "h" is the eylinder tube height and "t" is the thickness of said tube.
- 3. (Currently amended) The method of Claim 1, wherein said height "h" is approximately equal to [[the]] a diameter of [[the]] a recipient aortic annulus diameter "A".
- 4. (Currently amended) The method of Claim 1, wherein the <u>first, bottom, or second</u> edges, <u>or any combination thereof</u>, of each flap are cut to be rounded off along their free edge to create concave shaped leaflets.

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5. (Currently amended) The method of Claim 1, wherein scallop shaped segments of said outer tube wall are removed between commissures.

- 6. (Currently amended) The method of Claim 1, wherein said attaching is achieved by <u>any</u> one or more of suturing, <u>interlacing</u>, <u>interlocking</u>, <u>stapling</u>, <u>clipping</u>, <u>splicing</u>, <u>screwing</u>, <u>knitting</u>, <u>braiding</u>, <u>weaving</u>, <u>punching</u>, <u>tufting</u>, <u>gluing</u>, <u>welding</u>, <u>fusing</u>, and <u>laminating</u>.
- 7. (Currently amended) The method of Claim 1, wherein said tube [[is]] comprises a generally rectangular sheet of material that has two opposing sides joined together.
- 8 10. (Cancelled)
- 11. (Currently amended) [[A]] An endovascular valve, comprising:
- a. a flexible tube of material comprising having a first end and a second end, an inner wall, and an outer wall; and
- b. a plurality of leaflets formed from a portion of said first end by making a plurality of longitudinal incisions in said downstream second end to form a plurality of flaps, each flap having a first edge and second edge, involuting said flaps toward said inner wall and securing said first edge and second edge of each flap to said inner wall of said tube.
- 12. (New) The method of Claim 1, wherein said attaching is achieved by any one or more of suturing, stapling, and gluing.
- 13. (New) The method of Claim 1, wherein said attaching is achieved by suturing.
- 14. (New) The valve of Claim 11, wherein the material comprises a synthetic material.
- 15. (New) The valve of Claim 11, wherein the material comprises one or more of a polyglycolic acid, a polyhydroxyalkanote, a polylactic acid, a polycaprolactone, a fibrin gel, poly-4-hydroxybutyrate, a hydrogel, a polyester, a metal, and a nitinol.

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16. (New) The valve of Claim 14, wherein the material comprises one or more of polyglycolic acid, polylactic acid, and poly-4-hydroxybutyrate.

- 17. (New) The valve of Claim 11, wherein the material comprises an organic material.
- 18. (New) The valve of Claim 17, wherein the organic material comprises one or more of a polypropylene, a polyester, a silk, a nylon, a rubber, a silicone, a cellulosic material, a polytetrafluoroethylene, and a polyurethane.
- 19. (New) The valve of Claim 17, wherein the organic material comprises one or more of a polypropylene, a nylon, a silicone, and a polyurethane.
- 20. (New) The valve of Claim 11, wherein the material comprises a biological material.
- 21. (New) The valve of Claim 20, wherein the biological material comprises one or more of a pericardial tissue, an artery, a vein, a portion of a gastrointestinal tract, and a portion of an intestinal submucosa.
- 22. (New) The valve of Claim 20, wherein the biological tissue comprises one or more of an artery or a vein.
- 23. (New) The valve of Claim 20, wherein the biological material is decellularized.
- 24. (New) The valve of Claim 20, wherein the biological material comprises porcine tissue.
- 25. (New) The valve of Claim 20, wherein the biological material comprises human tissue.